

## PTO-1449

Sheet

1

of

1

**Complete If Known**

Application Number

10/699.116

**Filing Date**

October 31, 2003

**First Named Inventor**

Donnelly, et al.

## Art Unit

2189

Examiner Name

Chace, Christian

Attorney Docket Number

60809-0143-US

## U.S. PATENT DOCUMENTS


[illegible]

## FOREIGN PATENT DOCUMENTS

Examiner Initials	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Class	Subclass	Translation	
	Country Code <sup>2</sup> - Number <sup>3</sup> - Kind Code <sup>4</sup> (if known)					Yes	No
						x	

### OTHER NON PATENT LITERATURE DOCUMENTS

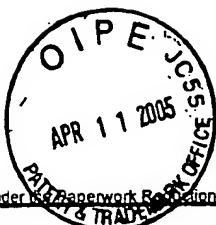
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published

Examiner Signature		Date Considered	5/6/05
-----------------------	---	--------------------	--------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>2</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**



not considered

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1

of 4

### Complete if Known

Application Number	10/699,116
Filing Date	October 31, 2003
First Named Inventor	Donnelly
Art Unit	2187
Examiner Name	Chace, C.
Attorney Docket Number	RAMB-01065US1

### U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-5742840	04-21-1998	Hansen et al.	
		US-5748872	05-05-1998	Norman	
		US-5860080	01-12-1999	James et al.	
		US-5867422	02-02-1999	John	
		US-5898863	04-27-1999	Ofer et al.	
		US-6006318	12-21-1999	Hansen et al.	
		US-6034878	03-07-2000	Osaka et al.	
		US-6038682	03-14-2000	Norman	
		US-6092229	07-18-2000	Boyle et al.	
		US-6125419	09-26-2000	Umemura et al.	
		US-6151648	11-21-2000	Haq	
		US-6154826	11-28-2000	Wulf et al.	
		US-6160423	12-12-2000	Haq	
		US-6255859	07-03-2001	Haq	
		US-6263413	07-17-2001	Motomura et al.	
		US-6327205	12-04-2001	Haq	
		US-6408402	06-18-2002	Norman	
		US-6487102	11-26-2002	Halbert et al.	

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**Complete if Known**

*(Use as many sheets as necessary)*

Sheet 2

of 4

Application Number	10/699,116
Filing Date	October 31, 2003
First Named Inventor	Donnelly
Art Unit	2187
Examiner Name	Chace, C.
Attorney Docket Number	RAMB-01065US1

[illegible][illegible]

**Examiner  
Signature**

Date  
Considered

\*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

***If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.***

not considered

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet **3** of **4**

### Complete if Known

Application Number	10/699,116
Filing Date	October 31, 2003
First Named Inventor	Donnelly
Art Unit	2187
Examiner Name	Chace, C.
Attorney Docket Number	RAMB-01065US1

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		*U.S. Patent Application Serial No. 10/713,868, filed 11-14-2003 by Pete D. Vogt	
		*U.S. Patent Application Serial No. 10/714,025, filed 11-14-2003 by Pete D. Vogt	
		*U.S. Patent Application Serial No. 10/714,026, filed 11-14-2003 by Pete D. Vogt	
		*U.S. Patent Application Serial No. 10/883,474, filed 06-30-2004 by Pete D. Vogt	
		*U.S. Patent Application Serial No. 10/882,999, filed 06-30-2004 by Pete D. Vogt	
		*U.S. Patent Application Serial No. 10/859,438, filed 05-31-2004 by Pete D. Vogt	
		*U.S. Patent Application Serial No. 10/858,850, filed 05-31-2004 by Pete D. Vogt	
		*U.S. Patent Application Serial No. 10/859,060, filed 05-31-2004 by Pete D. Vogt	
		NG, R. (Sun Microsystems Inc.), "Fast computer memories", IEEE Spectrum, October 1992, pp. 36-39	
		SALTERS, R.H.W. (Philips Research Laboratories), "Fast DRAMS for sharper TV", IEEE Spectrum, October 1992, pp. 40-42	

Examiner  
Signature

Date  
Considered

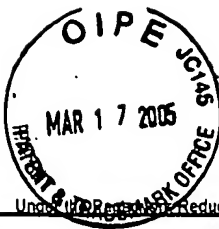
\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

\*Please note that the copies of these references enclosed herewith were obtained from the file history for U.S. Patent Application Serial No. 10/456,353. Applicants' attorney assumes that they are the correct copies.





not considered

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1

of 7

### Complete if Known

Application Number	10/699,116
Filing Date	October 31, 2003
First Named Inventor	Donnelly
Art Unit	2187
Examiner Name	Chace, C.
Attorney Docket Number	RAMB-01065US1

### U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-6016282	1-18-2000	Keeth	
		US-6449727	09-10-2002	Toda	
		US-4644532	02-17-1987	George et al.	
		US-4667305	05-19-1987	Dill et al.	
		US-4747100	05-24-1988	Roach et al.	
		US-4864563	09-05-1989	Pavey et al.	
		US-5228134	07-13-1993	MacWilliams et al.	
		US-5355467	10-11-1994	MacWilliams et al.	
		US-5408646	04-18-1995	Olnowich et al.	
		US-5537394	07-16-1996	Abe et al.	
		US-5544342	08-06-1996	Dean	
		US-5553266	09-03-1996	Metzger et al.	
		US-5557266	09-17-1996	Calvignac et al.	
		US-5604735	02-18-1997	Levinson et al.	
		US-5630095	05-13-1997	Snyder	
		US-5659710	08-19-1997	Sherman et al.	
		US-5787083	07-28-1998	Iwamoto et al.	
		US-5802054	09-01-1998	Bellenger	

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		WO 99/30240	06-17-1999	Intel Corporation		
		WO 99/41666	08-19-1999	Intel Corporation		
		WO 99/41667	08-19-1999	Intel Corporation		
		EP 1069509 A2	01-17-2001	Texas Instruments Incorporated		

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

not considered

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2

of 7

### Complete if Known

Application Number	10/699,116
Filing Date	October 31, 2003
First Named Inventor	Donnelly
Art Unit	2187
Examiner Name	Chace, C.
Attorney Docket Number	RAMB-01065US1

### U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-5802565	09-01-1998	McBride	
		US-5805798	09-08-1998	Keams et al.	
		US-5848145	12-08-1998	Gallagher et al.	
		US-5884036	03-16-1999	Haley	
		US-5893921	04-13-1999	Bucher et al.	
		US-5900017	05-04-1999	Genduso et al.	
		US-5901294	05-04-1999	Tran et al.	
		US-5911052	06-08-1999	Singhal et al.	
		US-5913044	06-15-1999	Tran et al.	
		US-5923893	07-13-1999	Moyer et al.	
		US-6247100	06-12-2001	Drehmel et al.	
		US-5953215	09-14-1999	Karabatsos et al.	
		US-6142830	11-07-2000	Loeffler	
		US-6185644	02-06-2001	Farmwald et al.	
		US-6266252	07-24-2001	Karabatsos	
		US-6317352	11-13-2001	Halbert et al.	
		US-6414904	07-02-2002	So et al.	
		US-6446158	09-03-2002	Karabatsos	

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

not considered

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 3

of 7

## Complete if Known

Application Number	10/699,116
Filing Date	October 31, 2003
First Named Inventor	Donnelly
Art Unit	2187
Examiner Name	Chace, C.
Attorney Docket Number	RAMB-01065US1

## U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-6493250	12-10-2002	Halbert et al.	
		US-6530006	03-04-2003	Dodd et al.	
		US-6449679	09-10-2002	Ryan et al.	
		US-6108731	08-22-2000	Suzuki et al.	
		US-5701313	12-23-1997	Purdham	
		US-5513135	04-30-1996	Dell et al.	
		US-6065092	05-16-2000	Roy	
		US-5034917	07-23-1991	Bland et al.	
		US-4977498	12-11-1990	Rastegar et al.	
		US-5068650	11-26-1991	Fernandez et al.	
		US-4947257	08-07-1990	Fernandez et al.	
		US-6643752	11-04-2003	Donnelly et al.	
		US-6690726	02-10-2004	Yavits et al.	
		US-5325493	06-28-1994	Herrell et al.	
		US-5867180	02-02-1999	Katayama et al.	
		US-6104417	08-15-2000	Nielsen et al.	
		US-6208273	03-27-2001	Dye et al.	
		US-5883839	03-16-1999	Tosaka et al.	

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard, ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Not considered

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 4

of 7

### Complete if Known

Application Number	10/699,116
Filing Date	October 31, 2003
First Named Inventor	Donnelly
Art Unit	2187
Examiner Name	Chace, C.
Attorney Docket Number	RAMB-01065US1

### U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-20040260991	12-23-2004	Vogt et al.	
		US-20040250181	12-09-2004	Vogt et al.	
		US-20040250153	12-09-2004	Vogt	
		US-20040150024	12-09-2004	Vogt	
		US-20040246786	12-09-2004	Vogt	
		US-20040246785	12-09-2004	Vogt	
		US-20040246767	12-09-2004	Vogt	
		US-20040015650	01-22-2004	Zumkehr et al.	
		US-20030177313	09-18-2003	Iyer et al.	
		US-20020083287	06-27-2002	Zumkehr et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Not considered

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 14498/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 5 of 7

### Complete if Known

Application Number	10/699,116
Filing Date	October 31, 2003
First Named Inventor	Donnelly
Art Unit	2187
Examiner Name	Chace, C.
Attorney Docket Number	RAMB-01065US1

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		Intel Developer Forum, "DDR2 Memory In 2004 Servers - Recipes For Successful Designs", September 2003	
		QBM Alliance, Platform Conference, "Quad Band Memory (QBM tm): DDR 200/266/333 devices producing DDR400/533/667, Jan. 23-24, 2002	
		KARABATSOS, C., "Quad Band Memory (QBM) Technology", Kentron Technologies, Inc., April 2001	
		Quad Band Memory (QBM), "The 'QBM Enabled' VIA PT880/PM880 Chipset Solutions with the Fastest Memory",	
		WEBER, F., "The AMD Athlon Processor: Future Directions", AMD	
		"Intel 82804AA Memory Repeater Hub for SDRAM (MRH-S) Datasheet", Intel Corp., pp. 2-48 (Nov. 1999)	
		"Intel 82805AA Memory Translator Hub (MTH) Datasheet", Intel Corp., pp. 1-48 (Nov. 1999)	
		CATALDO, A., "TI Fields DSP-Based Media Processor on a DIMM", EE Times (Jan. 2000)	
		MAC WILLIAMS, B., "PC Memory Directions For 1999 and Beyond", Intel Developer Forum, pp. 1-10 (Sep. 1998)	
		JOHNSON, B., "Direct RDRAM Basic Architecture and Program Overview", Intel Developer Forum, pp. 1-14 (Sep. 1998)	

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

not considered

PTO/SB/08b (08-03)

Approved for use through 05/30/2006. OMB 0851-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>Substitute for form 1449B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	10/699,116		
		Filing Date	October 31, 2003		
		First Named Inventor	Donnelly		
		Art Unit	2187		
		Examiner Name	Chace, C.		
Sheet	6	of	7	Attorney Docket Number	RAMB-01065US1

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		GILLINGHAM, P., "SLDRAM Architectural and Functional Overview", SLD RAM Consortium, SLD RAM Inc., pp. 1-14 (Aug. 1997)	
		"Draft Standard for a High-Speed Memory Interface (Synclink)", Draft 0.99 IEEE P1596.7-199X, IEEE Inc., pp. 1-51 (1996)	
		WIGGERS, H., "SyncLink A Proposal for an Implementation of IEEE P1596.4", Hewlett Packard, pp. 1-20 (Mar. 1995)	
		"KMM377S1620CT2 SDRAM Module Datasheet", Samsung Electronics Inc., pp. 1-2 (Nov. 1998)	
		"SLD4M18DR400 4MEG x 18 SLD RAM Datasheet", SLD RAM Inc., pp. 1-69 (July 1998)	
		POULTON, J., "Signaling in High Performance Memory Systems", IEEE Solid State Circuits Conference, slides 1-59 (Feb. 1999)	
		"SLDRAM 400Mb/s/pin Command/Address Repeater", SLD10400 Rev .5, SLD RAM Consortium, pp. 1-12 (Jan. 7, 1998)	
		Minutes of meeting no. 75 JEDEC JC-42.3 Committee on RAM Memories, and referenced attachment "Y" of the presentation titled "Synclink", May 24, 1995, New Orleans	
		Intel Developer Forum, "Fully Buffered DIMM (FB-DIMM) Server Memory Architecture: Capacity, Performance, Reliability, and Longevity", February 18, 2004	
		Intel Developer Forum, "Fully Buffered DIMM (FB-DIMM) Design Considerations", February 18, 2004	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

not considered

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 7 of 7

### Complete If Known

Application Number	10/699,116
Filing Date	October 31, 2003
First Named Inventor	Donnelly
Art Unit	2187
Examiner Name	Chace, C.
Attorney Docket Number	RAMB-01065US1

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		IEEE Standard for Scalable Coherent Interface (SCI), "Microprocessor and Microcomputer Standards Subcommittee of the IEEE Computer Society", IEEE Std 1596-1992	
		SCI, "P1596: SCI, A Scalable Coherent Interface", November 28, 1988	
		GUSTAVSON et al., DRAFT "The Scalable Coherent Interface Project (SuperBus)", SCI, August 22, 1988, Rev. 14	
		SCHANKE, "Proposal for Clock Distribution in SCI", SCI, May 5, 1989	
		JAMES, "Scalable I/O Architecture for Buses", COMPCON Spring 1989, SCI, November 28, 1988	
		VOLZ et al., "Position Paper On Global Clock For the Futurebus +", SCI, 1989	
		KRISTIANSEN et al., "Scalable Coherent Interface", to appear in Eurobus Conference Proceedings, May 1989	
		GUSTAVSON et al., "Macintosh HD:Desktop Folder:SLDRAMrepeaterConcerns", Sunday, November 23, 1997, 4 pages	
		JEDDELOH, JOE, "Fully Buffered DIMM (FB-DIMM)", Advanced Systems Technology, Micron Technology, Inc. April 15-16, 2004	

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.